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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,159

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EXAMINER

MUHAMMED, ABDUKADER S

ART UNIT

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2627

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/787,159	Applicant(s) KIM ET AL.	
	Examiner Abdukader Muhammed	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004 and 19 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 7-21 and 27-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicants' claim for foreign priority based on an application filed in Korea on 27 February 2003. However the applicant has not filed a certified copy of the 10-2003-0012414 application as required by 35 U.S.C. 119(b).
2. Applicant's election without traverse of Group I, including claims 1-6 and 22-26, in the reply filed on 19 July 2007 is acknowledged.
3. Claim 7-21 and 27-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 27 February 2003.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation “lead-in zone” in line 7. It is unclear whether this is intended to be the same as or different from “a lead-in zone” recited in line 2.

Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Ueda et al. (US Publication 2001/0007545 A1).

Regarding Claim 1, Ueda et al. teach a high-density recording medium, comprising: a lead-in zone in which recording medium information is recorded (lead-in area 103 includes control data; see figures 1A-2C and page 4 paragraph [0038], lines 1-3); and a specific area (burst cutting area BCA 102; see figure 1), prior to said lead-in zone, in which control information regarding a recording capacity of said high-density recording medium is recorded,

wherein the control information is one of the recording medium information recorded in lead-in a zone (see the abstract).

Regarding Claim 22, Ueda et al. teach a recording medium containing: a lead-in zone in which a control information is recorded (lead-in area 103 includes control data; see figures 1A-2C and page 4 paragraph [0038], lines 1-3); and a burst cutting area located prior to said lead-in zone (burst cutting area BCA 102; see figure 1), in which at least a channel bit length information, one of the control information recorded in said lead-in zone, is recorded in the burst cutting area (see the abstract).

8. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe et al. (US Publication 2004/0156294 A1).

Regarding Claim 1, Watanabe et al. teach a high-density recording medium, comprising: a lead-in zone in which recording medium information is recorded (lead-in area 21 and 22 in which the type of the disc or control information is recorded; see figure 2 and page 7 paragraph [0089], lines 1-3); and a specific area (bar-code area; see figure 2), prior to said lead-in zone, in which control information regarding a recording capacity of said high-density recording medium is recorded, wherein the control information is one of the recording medium information recorded in lead-in a zone (disc individual information/control information such as, number of layers, capacity, track pitch, types of ROM/RAM may be recorded in a lead-in area of the first layer or in a black bar code BBC or burst cutting area BCA on a disc surface; see page 15, paragraph [0168], lines 3-15).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US Publication 2004/0156294 A1).

Regarding claim 2, Watanabe et al. teach the limitations claim 1 for the reasons discussed above. Watanabe et al. differ from the claimed invention in that they do not specifically show that the recording medium is a Blu-ray disk. But it would have been obvious to one of ordinary skill in the art at the time the invention was made to extend/use certain characteristics of the CD or DVD disk technologies to Blu-ray disks as they are improvements of CD and DVD that are developed in the same area of technology.

Regarding Claim 3, as applied to claim 2 above and Watanabe et al. further teach that the specific area is a burst cutting area (BCA) (the specific area is bar-code area or burst cutting area BCA; see page 15, paragraph [0168], lines 9-14).

11. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US Publication 2004/0156294 A1) as applied to claim 3, above, further in view of Senshu (US Publication 2002/0191510 A1).

Regarding Claim 4, Watanabe et al. teach the limitations claim 3 for the reasons discussed above. Watanabe et al. differ from the claimed invention in that it does not specifically show that the burst cutting area includes a plurality of data units.

Senshu on the other hand teaches a burst cutting area with four data units with each row having five bytes that is comparable to the instant invention's figure 6 (see figure 2) and four bytes of each row in the BCA data field is an information (see page 1, paragraph [0005], lines 4-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a plurality data units in the system of Watanabe et al. since Senshu teaches that burst cutting area is provided to prevent illegal copying between disks (see page 1, paragraph [0002], lines 5-6) and to use part of the data area for error detection and error correction (see page 1, paragraph [0005], lines 6-8).

Regarding Claim 5, as applied to claim 4 above and Senshu further teach that the control information is repeatedly included in each data unit (four bytes of each row in the BCA data field is an information area or error detection code and four bytes of each row is an error correction code, it is repeated in each row; see page 1, paragraph [0005], lines 4-6).

12. Claims 6 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (US Publication 2001/0007545 A1).

Regarding Claims 6 and 26, Ueda et al. teach the limitations claims 1 and 22 for the reasons discussed above. Ueda et al. differ from the claimed invention in that they do not specifically show that the channel bit length information is variably set to a different value depending on the capacity of recording medium. But it is known in the art that the capacity of

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recording mediums depends on the channel bit length; if the channel bit length is shorter (smaller pit size, for example), the capacity of the recording medium will be higher. It would have been obvious to one of ordinary skill in the art at the time the invention was made to set the information that represents the channel bit length different for disks with different size/capacity in the system of Ueda et al. for the purpose of differentiating disks according to their size/capacity.

13. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al. (US Publication 2001/0007545 A1) as applied to claim 22, above, further in view of Senshu (US Publication 2002/0191510 A1).

Regarding Claim 23, Ueda et al. teach the limitations claim 22 for the reasons discussed above. Ueda et al. differ from the claimed invention in that they do not specifically show that the burst cutting area includes at least one data unit.

Senshu on the other hand teaches a burst cutting area with four data units with each row having five bytes that is comparable to the instant invention's figure 6 (see figure 2) and four bytes of each row in the BCA data field is an information (see page 1, paragraph [0005], lines 4-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a plurality data units in the system of Watanabe et al. since Senshu teaches that burst cutting area is provided to prevent illegal copying between disks (see page 1, paragraph [0002], lines 5-6) and to use part of the data area for error detection and error correction (see page 1, paragraph [0005], lines 6-8).

Regarding Claim 24, Ueda et al. teach the limitations claim 22 for the reasons discussed above. Ueda et al. differ from the claimed invention in that they do not specifically show that the burst cutting area includes plurality of data units.

Senshu on the other hand teaches a burst cutting area with four data units with each row having five bytes that is comparable to the instant invention's figure 6 (see figure 2) and four bytes of each row in the BCA data field is an information (see page 1, paragraph [0005], lines 4-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a plurality data units in the system of Watanabe et al. since Senshu teaches that burst cutting area is provided to prevent illegal copying between disks (see page 1, paragraph [0002], lines 5-6) and to use part of the data area for error detection and error correction (see page 1, paragraph [0005], lines 6-8).

Regarding Claim 25, as applied to claim 23 above and Senshu further teaches that the data unit contains a plurality of information bytes, and the channel bit length information is recorded in a predetermined information byte of data unit (BCA, which has four data units, is divided into n blocks and each of the block is further divided into k channel bits; see figure 2 and page 3, paragraph [0050] and [0051]).

Conclusion

14. The prior art made of record in PTO-892 Form and not relied upon is considered pertinent to applicant's disclosure.

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15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdukader Muhammed whose telephone number is (571) 270-1226. The examiner can normally be reached on Monday-Thursday 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER

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2 August 2007